

REMARKS

I. Claim Status

Claims 1-68 and 73-130 have been withdrawn. Claim 69 has been amended to more specifically cover a particular embodiment of the present invention. Support for the amendment can be found in the specification at, for example, p. 25, lines 15-16; p. 27, lines 4-9; p. 43, lines 3-10; p. 46, line 28 to page 47, line 23; p. 101, lines 10-13; p. 104, lines 14-18; p. 100, line 19 to p. 101, line 17; and p. 102, lines 23-25. New claims 131-144 have been added. Support for the new claims can be found throughout the specification, e.g.: p. 15, lines 22-24 and p. 17, lines 1-9 (claim 131); p. 48, line 17 (claim 132); p. 32, lines 22-31 (claim 133); p. 42, line 20 to p. 43, line 10 (claim 134); p. 42, line 25 to p. 43, line 5 (claim 135); p. 42, line 30 to p. 43, line 2 (claims 136-139); p. 39, lines 3-5 (claim 140); p. 4, line 24, p. 43, lines 14-15, and p. 101, lines 10-13 (claim 141); p. 14, lines 27-29 and p. 19 lines 9-12 (claim 142); and p. 14, lines 4-6 and p. 16, lines 4-6 (claims 143-144). No new matter has been introduced by the subject amendments and new claims. Upon entry of the present amendment, claims 69-72 and 131-144 are pending.

II. Rejection under 35 U.S.C. § 112, 2nd paragraph

Claims 69-72 stand rejected under 35 U.S.C. § 112, second paragraph because the phrase "the plurality comprises" of claim 69 is allegedly vague and indefinite. Claim 69 has been amended to specify a plurality of enzymes and the subsequent reference to "plurality" has been amended to a "plurality of enzymes." In view of this amendment, withdrawal of the rejection under 35 U.S.C. § 112, second paragraph is respectfully requested.

III. Rejections under 35 U.S.C. § 102

A. Pirrung et al. – U.S. Pat. No. 5,143,854

Claims 69-70 and 72 stand rejected under 35 U.S.C. § 102(b) as being allegedly anticipated by Pirrung et al. (U.S. Pat. No. 5,143,854). This rejection is respectfully traversed in view of the amended and new claims.

The Pirrung et al. patent is directed to a method of synthesizing a peptide array by attaching photoremovable groups to the surface of a substrate, exposing selected regions of the

substrate to light to activate those regions, attaching an amino acid monomer with a photoremovable group to the activated regions, and repeating the steps of activation and attachment.

Amended claim 69 is directed to a biosensor for detecting the presence of small molecules in a sample. The Pirrung et al. patent does not anticipate amended claim 69, because it does not describe the combination of elements claimed, i.e., a solid support, a plurality of enzymes immobilized on the solid support, wherein the plurality of enzymes comprises enzymes having different small molecule substrate specificities, a detection system, and a data storage system, all as specified in amended claim 69. All of the pending claims depend either directly or indirectly on amended claim 69. Therefore, it is respectfully submitted that all of the pending claims are novel over the Pirrung et al. patent.

B. Heller et al. – U.S. Pat. No. 5,605,662

Claims 69-72 stand rejected under 35 U.S.C. § 102(b) as being allegedly anticipated by Heller et al. (U.S. Pat. No. 5,605,662). This rejection is respectfully traversed in view of the amended and new claims.

The Heller et al. patent is directed to a self-addressable self-assembling microelectronic system. In contrast to the amended and new claims, the Heller et al. patent does not describe the claimed biosensor which specifies the combination of a solid support, a plurality of enzymes immobilized on the solid support, a detection system, and a data storage system, each element as specified in amended claim 69. Accordingly, the Heller et al. patent does not anticipate any of the pending claims.

C. Wagner et al. – U.S. Pat. No. 6,329,209

Claims 69-72 stand rejected under 35 U.S.C. 102(e) as being allegedly anticipated by Wagner et al. (U.S. Pat. No. 6,329,209). This rejection is respectfully traversed in view of the amended and new claims.

The Wagner et al. patent is directed to "[a]rrays of *protein-capture agents* useful for the simultaneous *detection of a plurality of proteins* which are expression products, or fragments thereof" (U.S. Pat. No. 6,329,209 at Abstract) Wagner et al. do not describe a biosensor having the

claimed combination of elements, i.e., a solid support, a plurality of enzymes immobilized on the solid support, wherein the plurality of enzymes comprises enzymes having different small molecule substrate specificities, a detection system, and a data storage system, each element as specified in amended claim 69. Therefore, the Wagner et al. patent does not anticipate any of the pending claims.

CONCLUSION

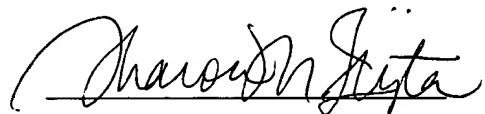
In view of the amendments and remarks provided above, it is respectfully submitted that the pending claims are in condition for allowance and notification to that effect is respectfully requested. Should the Examiner believe that a telephone conference would expedite the prosecution of this application, the undersigned can be reached at the telephone number set forth below. The Commissioner is hereby authorized to charge any deficiency in fees or credit any overpayment in connection with this submission to Deposit Account No. 50-0990.

Respectfully submitted,

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